

19990622.qrp v01\_n496.qrl.990622

Date: Tue, 22 Jun 1999 19:15:58 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 1496

QRP-L Digest 1496

Topics covered in this issue include:

- 1) [43232] Tek 2215 Scope focus info  
by "rohre" <rohre@arlut.utexas.edu>
- 2) [43233] Re: (fwd) Heathkit qrp HW-7 Microphonic problem  
by Niels Jensen Kristjansson <nkristja@cadvision.com>
- 3) [43234] Re: VE3JC/QRP Bike Mobile  
by Pete Burbank <plburbank@kih.net>
- 4) [43235] VE3DNL:update  
by Jay Bromley <w5jay@alltel.net>
- 5) [43236] Need help with RED HOT NC-20 torrids!!!  
by Dave Redfearn <n4elm@texoma.net>
- 6) [43237] Re: OHR WM-2 Wattmeter  
by dfirlik@juno.com
- 7) [43238] Fw: OHR WM-2 Wattmeter  
by "Steve Sorrell" <ap036@detroit.freenet.org>
- 8) [43239] mini-dxpedition to WY  
by "Buck, Preston D" <BuckPD@corning.com>
- 9) [43240] Re: Need help with RED HOT NC-20 torrids!!  
by Dave Redfearn <n4elm@texoma.net>
- 10) [43241] QRPeddaling & Propagation  
by VE3JC - John C <jbcumming@wwdc.com>
- 11) [43242] Re: VE3JC/QRP Bike Mobile  
by "Jim Stafford, W4Q0" <w4qo@amsat.org>
- 12) [43243] Re: Not QRP, tone generate circuitry needed  
by "Jim Stafford, W4Q0" <w4qo@amsat.org>
- 13) [43244] Basic Stamp 2 ID'er  
by Brian Short <bshort@speedchoice.com>
- 14) [43245] Re: Basic Stamp 2 ID'er  
by Norm Melick <henmel@worldnet.att.net>
- 15) [43246] hamstick dipole  
by Kyle Lusk <klusk@bhmvending.com>
- 16) [43247] Proposed QRP rig appearance Contest  
by Stanley Wilson <microres@crl.com>
- 17) [43248] Re: Regen RX Using Q-multiplier Principle  
by Bruce Kizerian <kizerian@ced.utah.edu>
- 18) [43249] Re: Basic Stamp 2 ID'er  
by n4elm@texoma.net
- 19) [43250] QSL ROUTES

- by ARDUJENSKI@aol.com
- 20) [43251] Re: Proposed QRP rig appearance Contest  
by "Walter Dufrain" <walter@inlink.com>
  - 21) [43252] Western Florida QRP Club First Meeting - Correction  
by "Stephen D. Cohen" <scohen@xps.xybion.com>
  - 22) [43253] MFJ 931 Tuner manual?  
by Clifton W Sikes <ab5uacw@juno.com>
  - 23) [43254] Re: J-Pole article makes it into QST Webzine  
by "Bill Long" <wlong@wmdc.edu>
  - 24) [43255] Re: Not QRP, tone generate circuitry needed  
by Zack Lau <zlau@arrl.org>
  - 25) [43256] Re: Regen RX Using Q-multiplier Principle  
by "Michael A. Gipe" <mgipe@reliablemeters.com>
  - 26) [43257] Re: MFJ 931 Tuner manual?  
by Mark Sailer <msailer@msailer.rhic.bnl.gov>
  - 27) [43258] Re: Not QRP, tone generate circuitry needed  
by Jerry Haigwood <w5jh@swlink.net>
  - 28) [43259] HW-7 xcvr microphonics & hum {pre-historic times}  
by jaywa5whn@juno.com
  - 29) [43260] Re: Proposed QRP rig appearance Contest  
by "Steven Weber" <kd1jv@moose.ncia.net>
  - 30) [43261] Re: Proposed QRP rig appearance Contest  
by Richard Rood <fcs@juno.com>
  - 31) [43262] FD Power Safety??  
by Bcieslak@ra.rockwell.com
  - 32) [43263] Club talk on overheads  
by "Jim Stafford, W4Q0" <w4qo@amsat.org>
  - 33) [43264] Re: Testing Coax Cables  
by HWRM1SS@aol.com
  - 34) [43265] Re: Proposed QRP rig appearance Contest  
by Bill Jones <kd7s@psnw.com>
  - 35) [43266] Re: Not QRP, tone generate circuitry needed  
by Zack Lau <zlau@arrl.org>
  - 36) [43267] Re: MFJ 931 Tuner manual?  
by Clifton W Sikes <ab5uacw@juno.com>
  - 37) [43268] code materials  
by Tim Pettibone <tpettibo@NMSU.Edu>
  - 38) [43269] Re: Testing Coax Cables  
by Karl.Kanalz@optelinc.com
  - 39) [43270] EA8/DK9PD on 20  
by Goran Hosinsky <hosinsky@royac.iac.es>
  - 40) [43271] correction -  
by Tim Pettibone <tpettibo@NMSU.Edu>
  - 41) [43272] Re: Proposed QRP rig appearance Contest  
by "Richard Brummer" <obvious@bestweb.net>
  - 42) [43273] Robert Dollar 3rd Overtone Xtal Osc Circuit  
by George F Franklin <w0av@juno.com>
  - 43) [43274] Re: Proposed QRP rig appearance Contest

- by George F Franklin <w0av@juno.com>
- 44) [43275] RE: Testing Coax Cables  
by Dave Barrett <DBarrett@creo.com>
- 45) [43276] Re: Testing Coax Cables  
by "Mike Yetzko" <myetzko@insydesw.com>
- 46) [43277] Not QRP: LAN/Modem problem  
by Goran Hosinsky <hosinsky@jet.es>
- 47) [43278] FM ElmeRadio and Other Regenerate Ideas  
by Bruce Kizerian <kizerian@ced.utah.edu>
- 48) [43279] Testing Coax Cables (revisited)  
by Karl.Kanalz@optelinc.com
- 49) [43280] tubes for sale  
by lane cox <lanecox@hotmail.com>
- 50) [43281] Re: Where did "K-2" come from?  
by Wayne Burdick <n6kr@elecraft.com>
- 51) [43282] Re: Testing Coax Cables  
by "Mike W. Burger" <mike@gold.chem.hawaii.edu>
- 52) [43283] Re: Proposed QRP rig appearance Contest  
by "Tony Fishpool" <g4wif@btinternet.com>
- 53) [43284] TDR on the cheap - a one transistor design  
by Glen Leinweber <leinwebe@mcmail.cis.McMaster.CA>
- 54) [43285] FW: Collins parts  
by "Ed Tanton" <n4xy@att.net>
- 55) [43286] Outbacker as mobile antenna?  
by Jim Lowman <jmlowman@ix.netcom.com>
- 56) [43287] TH6DXX antenna info wanted  
by tom whalen <wb5qyt@eFortress.com>
- 57) [43288] Re: FD Power Safety??  
by K2UD@aol.com
- 58) [43289] RE: mini-dxpedition to WY  
by "Buck, Preston D" <BuckPD@corning.com>
- 59) [43290] RE: DSW-40 QSOs  
by "Ed Tanton" <n4xy@att.net>
- 60) [43291] Re: Where did "K-2" come from?  
by "Jerry Decker" <n5rv@hex.net>
- 61) [43292] MFJ 941 Tuner.....for sure!  
by Clifton W Sikes <ab5uacw@juno.com>

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Date: 21 Jun 1999 18:15:44 -0500  
From: "rohre" <rohre@arlut.utexas.edu>  
To: qrp-l@lehigh.edu  
Subject: [43232] Tek 2215 Scope focus info  
Message-ID: <n1282133516.75865@msmailgw1.arlut.utexas.edu>

I did find and forwarded to Jeff a list of suspect resistors, and pots of the auto focus circuit for this scope. It derives focus from -2000 volt CRT

supply , and uses a control voltage thru Q877 to track the intensity setting and readjust the focus. If anyone else needs the list of resistors to check, email me. Of course, a bad transistor could affect the focus as well.

One of the criteria in picking up complex test equipment is whether the seller has the manual for it. It certainly saves your time when there is a problem. I have a scope I have not put on the market, because it came to me without a manual, and it needs work. I am reluctant to put something like that onto friends. I am selling it for a ham's estate, and if anyone wants a later model Tek with a problem, let me know. It has a spot of trace on CRT, but no sweep, and no manual, and no portable handle, thus it might make a bench scope for someone, but it could be a bad CRT as well.

72, Stuart K5KVH

-----  
Date: Mon, 21 Jun 1999 17:57:35 -0600  
From: Niels Jensen Kristjansson <nkristja@cadvision.com>  
To: qrp-1@Lehigh.EDU  
Subject: [43233] Re: (fwd) Heathkit qrp HW-7 Microphonic problem  
Message-ID: <1.5.4.16.19990621172910.1b272c4a@cadvision.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="iso-8859-1"  
Content-Transfer-Encoding: quoted-printable  
Content-Transfer-Encoding: quoted-printable

Hi Gang,

You are correct in assuming the problem is not a faulty ground. I restored an

HW-7 to original condition and found the microphonics really bad, in fact I=

=20 had a headset on and my XYL was calling me. The plates on the large ganged preselect capacitor picked it up causing a momentary confusion hi hi. When=

=20 the preselector is peaked the problem is at it=B4s worst and the mechanical movement of the plates is modulating the incoming signal, this is a direct conversion receiver. I believe there was a remedy for this in QST of May=

1973 p.42 if memory serves, perhaps someone can verify this one? I consisted of adding capacitance to the input circuit and make the preselector a smaller value that in turn make the plates smaller reducing the microphonics.

72 de Niels  
VE6NJK/TF3NJ

Calgary, AB  
CANADA

>  
>Although some Heath gear has a problem with grounds, I don't believe that=  
to  
>be the cause of the HW-7 microphonics. These rigs had that feature new and  
>there was a web page out there with a fix, but I can't find the link. I  
>seem to recall it having to do with the caps surrounding the lone IC, but I  
>can't say for sure.  
>  
>72/73 de WB8RCR <http://www.qsl.net/wb8rcr/>  
>didileydadidah QRP-L #1446 Code Warriors #35  
>  
>  
>  
>

-----  
Date: Mon, 21 Jun 1999 20:39:59 -0400  
From: Pete Burbank <plburbank@kih.net>  
To: <qrp-l@Lehigh.EDU>  
Subject: [43234] Re: VE3JC/QRP Bike Mobile  
Message-ID: <3.0.32.19990621203955.006ea17c@kih.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>  
>John's setup includes a QRP+ xcvr and an outbacker HF antenna. He  
>copied me solidly while I was running 900mW.  
>  
>The ability of the ionosphere to efficiently reflect such minute amounts  
>of RF power never ceases to amaze me.  
>  
>72, Paul AA4XX  
Yes...it constantly amazes me too! I usually run 5 watts and Europe  
is no problem. I worked John on 20 meters a few days ago.  
The key seems to be a decent antenna...not necessarily a gain  
antenna...a good ground system and proper matching.  
Sometimes power QRN is the major barrier (why I live in the country).  
You gotta hear 'em.  
It would be interesting to open a forum on QRP-L on "How  
I track down local Rx QRN".

72/3/88 Pete NV4V

-----  
Date: Mon, 21 Jun 1999 20:11:09 -0500  
From: Jay Bromley <w5jay@alltel.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [43235] VE3DNL:update  
Message-ID: <376EE2AD.BF53EB09@alltel.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Gang,  
I got two weeks behind, going to HamCom, work, ect. The last week I paid for having such good time at HamCom by working several 18 hour days. Being on call last week was not a very good experience for me. I did get out 30+ kits today. However I still have that many letters to open and I am running out of kits. Not to fear, I have all the parts to go for another hundred. While I am making all kind of excuses, old K5F0 drop by and kept me up well pass midnight. He was on a top secret mission and twisted my arm to stay up that late. I do plan on getting caught up this week on all kit orders. I also don't cash the checks till I am ready to ship, so be patient if your checks do clear right away. Thanks a bunch you folks have been great!!  
73 de w5jay..

-----  
Date: Mon, 21 Jun 1999 20:31:57 -0500  
From: Dave Redfearn <n4elm@texoma.net>  
To: qrp-1@lehigh.edu  
Subject: [43236] Need help with RED HOT NC-20 torrids!!!  
Message-ID: <376EE78D.D86DF3BF@texoma.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Hey guys, a little help here.

I'm building a RED HOT NC20 and I'm on a tight schedule to get it finished.

I can not figure out how to wind the toroids.  
The pictures in the manual are not clear on how the wire comes off the core or how the link windings are placed and for me the instructions

don't help much since I wind "left handed".

For T1 & T2, the PC board layout has two holes on each side. It looks like you are supposed to wind the links in the space between the start and stop of the primary windings but the primary and secondary windings will be cross phased (the ground for the primary is on the opposite side as the ground for the secondary). The schematic shows the primary and secondary in phase (grounded on the same side).

I've already emailed Dave, but no response yet and I need to get this done.

So what is the secret of the RED HOT toroids?

73 - Dave

=====  
Dave Redfearn, ARS N4ELM, McKinney, TX  
Email: n4elm@NOJUNKtexoma.net (to reply, remove NOJUNK)  
QRL? de N4ELM/qrp

-----  
Date: Mon, 21 Jun 1999 18:13:22 -0400  
From: dfirlik@juno.com  
To: qrp-l@Lehigh.EDU  
Subject: [43237] Re: OHR WM-2 Wattmeter  
Message-ID: <19990621.220624.-132821.0.dfirlik@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

On Mon, 21 Jun 1999 08:19:41 -0700 (PDT) Ron Stark <ku7y@dri.edu> writes:

>I eat when I'm hungry, sleep when I'm tired, work when I  
>feel like it and don't pay much attention to a clock!  
>  
>And in just a bit less than two years when I retire I'm  
>going to care what time it is even less!

Hi Ron,

I was taught that "retirement" was when a person could get up in the morning and then schedule the day to suit their mood. Sounds like you're there.

73,

Don K8AQZ  
Grand rapids, MI

-----  
Get the Internet just the way you want it.  
Free software, free e-mail, and free Internet access for a month!  
Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.  
-----

Date: Tue, 22 Jun 1999 02:26:43 +0100  
From: "Steve Sorrell" <ap036@detroit.freenet.org>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [43238] Fw: OHR WM-2 Wattmeter  
Message-ID: <010201bebc4e\$5cd841a0\$c642b3c7@sorrells>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Nope, 'retirement' is when you DON'T DO schedules any more, period.  
de Steve

----- Original Message -----

From: <dfirlik@juno.com>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Sent: Monday, June 21, 1999 23:13  
Subject: Re: OHR WM-2 Wattmeter

>  
> On Mon, 21 Jun 1999 08:19:41 -0700 (PDT) Ron Stark <ku7y@dri.edu> writes:  
>  
> >I eat when I'm hungry, sleep when I'm tired, work when I  
> >feel like it and don't pay much attention to a clock!  
> >  
> >And in just a bit less than two years when I retire I'm  
> >going to care what time it is even less!  
>  
> Hi Ron,  
>  
> I was taught that "retirement" was when a person could get up in the  
> morning  
> and then schedule the day to suit their mood. Sounds like you're there.  
>  
> 73,  
>  
> Don K8AQZ



> Grand rapids, MI  
> -----  
> Get the Internet just the way you want it.  
> Free software, free e-mail, and free Internet access for a month!  
> Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.  
>

-----  
Date: Mon, 21 Jun 1999 22:28:59 -0400  
From: "Buck, Preston D" <BuckPD@corning.com>  
To: "'qrp-1'" <qrp-1@Lehigh.EDU>  
Subject: [43239] mini-dxpedition to WY  
Message-ID: <9C472CF03C5ED111BBF20000F84A17010125BC80@EAGLE.CORNING.COM>  
Content-Return: allowed  
Mime-Version: 1.0  
Content-Type: text/plain

Greetings all,

Business has brought me to Salt Lake City, UT. Noticing on the map how close I am to WY, and that I have some free time, I am going to drive to WY tomorrow for a mini-dxpedition (or field day prep event, or boondoggle).

I brought my SW40, rainbow tuner, wire, batteries, and straight key. So if you need 2xQRP WY for WAS, listen for me tomorrow.

I will try to start at 1900 mountain time but I can't promise that because I don't know how long it will take to drive there. Nor do I know if my meetings will end at 1700. I plan to operate until I don't hear anybody else or 2300, whichever comes first. 0600 flights are not to be taken lightly.

So look for me around 7.040. Code speed is about 15 wpm with 2.5 watts out to an end-fed wire. I will make a special QSL card to commemorate the event.

73,  
Preston, n0g1m/p, temp in UT

my words, not my employer's

-----  
Date: Mon, 21 Jun 1999 21:32:38 -0500  
From: Dave Redfearn <n4elm@texoma.net>  
To: qrp-1@lehigh.edu  
Subject: [43240] Re: Need help with RED HOT NC-20 torrids!!  
Message-ID: <376EF5C6.1636C209@texoma.net>

MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Thanks for the toroid suggestions.

I reviewed the manual again and further along the picture for T4 is much clearer and the wires are plainly visible.

It kinda makes sense now but it still sorta looks like the primary and secondary windings end up out of phase.

73 - Dave

=====  
Dave Redfearn, ARS N4ELM, McKinney, TX  
Email: n4elm@NOJUNKtexoma.net (to reply, remove NOJUNK)  
QRL? de N4ELM/qrp

-----  
Date: Mon, 21 Jun 1999 23:45:16 -0400  
From: VE3JC - John C <jbcumming@wwdc.com>  
To: aa4xx@amsat.org  
Cc: klqrp <klqrp@waterw.com>, QRP-L <QRP-L@lehigh.edu>, QRP-CANADA <qrp-canada@lists.gpfn.sk.ca>  
Subject: [43241] QRPeddaling & Propagation  
Message-ID: <376F06CC.27276982@wwdc.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Paul Stroud AA4XX wrote:

> The ability of the ionosphere to efficiently reflect such minute amounts  
> of RF power never ceases to amaze me.

Well Paul it was great fun working you from the bike on Friday evening. When you reported a significant increase in my signal (from about s5 to 599 plus), I had actually stopped on an overpass, which happens to be at a very high point with respect to the surrounding countryside.

Since listening to Russ Carpenter's talk at F.D.I.M. concerning the effects of terrain on antennas, I've been thinking of my bike setup as kind of a slow moving "propagation lab". After factoring out the effects of powerline noise, it's interesting to see the variations in signal strength as the terrain changes. Except in the immediate vicinity of some 115kv lines, I had no problem copying your 900 mW.

By the way, I've added a tick-4 keyer built in a small aluminum diecast box to the bike setup. This gives me two memory messages, so I can steer the bike with one hand, get a drink from the water bottle with the other, and still send CQ!

72, JC

		VE3JC John Cumming
Q		Delaware, ON CANADA
/\		jbcumming@wwdc.com
@` / ^-----		hf qrp cw bicycle mobile
(*) \ (*)		<a href="http://www.geocities.com/CapeCanaveral/Lab/7378/">http://www.geocities.com/CapeCanaveral/Lab/7378/</a>

-----  
Date: Tue, 22 Jun 1999 00:19:40 -0400  
From: "Jim Stafford, W4Q0" <w4qo@amsat.org>  
To: QRP-L <qrp-l@lehigh.edu>  
Subject: [43242] Re: VE3JC/QRP Bike Mobile  
Message-ID: <376F0ED8.3A97547E@amsat.org>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Great story on John VE3JC and his bike mobile. FYI John had his bike at Dayton/FDIM on Saturday night at the "Radio Show" and it was a major hit. It was also featured in the Oct 98 and Jan 99 issue of QRP Quarterly. You can spot it easily at:

[http://www.qsl.net/wd8rif/qq\\_arci.htm#oct98](http://www.qsl.net/wd8rif/qq_arci.htm#oct98)

The article is not on line (yet!) as far as I know.

Great report Paul and great working condx John!

--  
Jim Stafford, W4Q0            770-993-9500            VP - QRPARCI #6515  
11395 West Road            770-993-8932 fax            Mgr - W4WOW SciTrek  
Roswell, GA 30075            w4qo@amsat.org            Dir- RadioActive Schools  
DBA/Stafford Enterprises/By Jimeny SCF  
<http://www.america.net/~w4qo>

-----  
Date: Tue, 22 Jun 1999 00:27:35 -0400  
From: "Jim Stafford, W4Q0" <w4qo@amsat.org>  
To: kory@avatar.com, QRP-L <qrp-l@lehigh.edu>  
Subject: [43243] Re: Not QRP, tone generate circuitry needed  
Message-ID: <376F10B3.16E0F2DF@amsat.org>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Kory - If it could be used in QRP - it's QRP!!!

This one is close. I actually have the kit which I bought at Dayton in 1998. Still not built <red face>

My friend built his and it works fine. May not go high enough in freq:

[http://www.debco.com/db\\_online/kit3.htm#dk-23](http://www.debco.com/db_online/kit3.htm#dk-23)

--  
Jim Stafford, W4Q0            770-993-9500            VP - QRPARCI #6515  
11395 West Road            770-993-8932 fax            Mgr - W4WOW SciTrek  
Roswell, GA 30075            w4qo@amsat.org            Dir- RadioActive Schools  
DBA/Stafford Enterprises/By Jimeny SCF  
<http://www.america.net/~w4qo>

-----  
Date: Tue, 22 Jun 1999 05:43:06 +0000  
From: Brian Short <bshort@speedchoice.com>  
To: qrp-l@lehigh.edu  
Subject: [43244] Basic Stamp 2 ID'er  
Message-ID: <4.1.19990622054217.026249a0@mail.phoenix.speedchoice.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Just started playing with a Basic Stamp 2 and below is  
a CW ID'er which keys my radio via a single NPN transistor.

If someone has a good reference on precise CW character  
timing and weighting, I am interested.

73, Brian

---

' Basic Stamp 2 ID'er  
' (c)Brian Short 21-June-99 All Rights Reserved Worldwide

' Constants

OUT CON 1  
IN CON 0

DELAY\_TIME CON 10000

DAH\_TIME CON 300  
DIT\_TIME CON 100

' Set Up the Output Port (P8)

'  
'  
' C ----- Rig  
' P8 ---/\ /\ /\ --- B  
' E ----+----- Gnd  
' |  
' ---  
' -  
' Q1 above is NPN  
' R1 above is 1K  
'

DIR8 = OUT

GOTO TOP

' Subroutines

DAH:

HIGH 8  
PAUSE DAH\_TIME  
LOW 8  
PAUSE DIT\_TIME  
RETURN

DIT:

HIGH 8  
PAUSE DIT\_TIME

```
LOW 8
PAUSE DIT_TIME
RETURN
```

```
SPACE:
  LOW 8
  PAUSE DAH_TIME
  RETURN
```

```
WORD_SPACE:
  LOW 8
  PAUSE DAH_TIME
  PAUSE DAH_TIME
  PAUSE DAH_TIME
  RETURN
```

```
' Basic Stamp ID'er
```

```
TOP:
  GOSUB DAH
  GOSUB DIT
  GOSUB DIT
  GOSUB SPACE
  GOSUB DIT

  GOSUB WORD_SPACE

  GOSUB DAH
  GOSUB DIT
  GOSUB DAH

  GOSUB SPACE

  GOSUB DAH
  GOSUB DAH
  GOSUB DIT
  GOSUB DIT
  GOSUB DIT

  GOSUB SPACE

  GOSUB DAH
  GOSUB DAH
  GOSUB DAH

  GOSUB SPACE
```

GOSUB DAH  
GOSUB DIT

PAUSE DELAY\_TIME

GOTO TOP

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Brian K. Short <http://www.qex.net/k7on/> <mailto:k7on@arrl.net>

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Date: Tue, 22 Jun 1999 00:55:01 -0700  
From: Norm Melick <henmel@worldnet.att.net>  
To: unlisted-recipients;; (no To-header on input)  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [43245] Re: Basic Stamp 2 ID'er  
Message-ID: <376F4155.CF4AC108@worldnet.att.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Brian Short wrote:

> If someone has a good reference on precise CW character  
> timing and weighting, I am interested.

This is the way I understand it, not necessarily the way I  
send it.

The basic code element is the dot, or unit pulse.

1. The time duration of a dot and a space is that of 2 unit pulses.
2. A dash is 3 unit pulses long.
3. The space between letters is 3 unit pulses.
4. The space between words or groups is 7 unit pulses.
5. A speed of one baud is one pulse per second.

If the key is adjusted to give the proper dots, space and dash values above, the code speed can be found from the formula;  $\text{Speed(wpm)} = \text{dots/min.}/25 = 2.4 \times \text{dots/sec.}$  Soooo, if a properly adjusted electronic keyer gives a string of dots that count to 10 dots per second,  $\text{speed} = 2.4 \times 10 = 24$  wpm. Modern electronic keyers use a clock or pulse

generator circuit which feeds a flip-flop dot generator.  
For these keyers the code speed may be determined directly  
from the clock frequency.

$\text{Speed(wpm)} = 1.2 \times \text{clock frequency (Hz)}.$

For a quick and simple means of determining the code speed,  
send a continuous string of dashes and count the number of  
dashes which occur in a 5-second period. This number is a  
close approximation of the code speed in words per minute.

Norm

-----  
Date: Tue, 22 Jun 1999 07:54:40 -0500  
From: Kyle Lusk <klusk@bhm vending.com>  
To: "'qrp-1'" <qrp-1@Lehigh.Edu>  
Subject: [43246] hamstick dipole  
Message-ID: <01BEBC84.7CC8EC40.klusk@bhm vending.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Could I feed a hamstick dipole with 300 ohm wire?  
Signed  
Dudd.

Thank you

-----  
Date: Tue, 22 Jun 1999 05:40:41 -0700 (PDT)  
From: Stanley Wilson <microres@crl.com>  
To: qrp-1@Lehigh.EDU  
Subject: [43247] Proposed QRP rig appearance Contest  
Message-ID: <Pine.SUN.3.91.990622053342.29224A-100000@crl2.crl.com>  
Mime-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Let's face it fellows the average QRP rig looks like it is home brew.  
There have been a few rigs that had that something extra (i.e. the  
ANV-20, SPRAT Nr. 80, Autumn 1994), however, for the most part our QRP  
rigs look like something built with limited tools. We have seen some  
really nice keys like the NorCal K8FF QRPp key on the cover of Winter 97  
issue. So tools are not the problem.



So I would like to suggest a contest. We know what is needed. A audio and RF level control, audio and RF bandpass, key and phone jack, tuning dial, S-meter would be nice, band switch, a few LEDs, electronic keyer controls, filter controls, etc..

Isn't it time to come up with a nice look for our units. If it is done correctly it would be possible to adapt to several different internal circuit designs.

I would appreciate your inputs. Not sure what the prize would be, but it is almost a year until Dayton, maybe it could become the next kit project.

Electronics specs: IF a LCD is used, etc. must not generate RFI or must be built in such a way that the panel is well shielded.

Now I am sure everyone has an opinioin on what a QRP rig should look like, so here is your chance to become a designer without the math, SPICE, etc.

de Stn AK0B  
microres@crl.com

-----  
Date: Tue, 22 Jun 1999 06:57:56 -0600  
From: Bruce Kizerian <kizerian@ced.utah.edu>  
To: Graham Firth <Graham.Firth@BTinternet.com>  
Cc: qrp-1@Lehigh.EDU, Charles.Kitchin@analog.com  
Subject: [43248] Re: Regen RX Using Q-multiplier Principle  
Message-ID: <376F8854.B007CC1C@ced.utah.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Thanks Graham

Very clever and unique design.

> The detector is what used to be called an "Anode Bend"detector - now probably  
> called a "Drain Bend"! Used because it is a high impedance across the coil.

On this side of the Atlantic it is called an infinite-impedance detector and is described in the 1993 ARRL handbook on page 18-11. If I am not mistaken, it has no voltage gain but very high power gain due to its very high input impedance and comparatively low output impedance. Dan Wissel used this detector in his OCR regen

described in the June 98 QST. I have toyed with this circuit as part of my ongoing improvement of the ElmeRadio, but have opted for a FET gain stage instead. The improvement in the ElmeRadio performance with the FET buffer is pretty amazing. I will be posting an updated schematic and front panel soon.

> The Q-multiplier bit is a Colpitts oscillator with it's gain, hence the  
> regeneration, controlled by a variable resistor. This should be at least a 10  
turn  
> pot - the value doesn't really matter as it is just a potential divider

Does this mean that your Q-multiplier could be controlled by a DC voltage? I have been playing with the idea of a feedback controlled regenerative stage where the regen level would adjust itself to the "optimum" point automatically as you tuned across the band (after an initial setting is entered by the operator). Call it ARC for automatic regeneration control. There are several ways to do this. In Kitchin's regen stage the bias voltage could be varied. Making the regeneration "automatic" would be a major improvement and go a long ways toward re-popularizing regenerative radios.

> The one I built was "ugly" construction.

Ugly is beautiful!

> Oh and BTW, Arnie Coro C02KK has put the info on his web page:

<http://www.radiohc.org/Distributions/Dxers/regen2.html> (this is a different address than Graham originally posted in his original message.

I checked this out. It looks real good on his page.

Keep the homebrew fires burning!

Bruce kk7zz

-----  
Date: Tue, 22 Jun 99 13:38:10 +0000  
From: n4elm@texoma.net  
To: henmel@worldnet.att.net, Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [43249] Re: Basic Stamp 2 ID'er  
Message-ID: <19990622133810.68A9115ED23@mail.texoma.net>

Norm wrote:

>This is the way I understand it, not necessarily the way I  
>send it.

Me too!

>The basic code element is the dot, or unit pulse.

>1. The time duration of a dot and a space is that of 2 unit  
>pulses.

A dot is one time unit.

The ratio is 1:3; one time unit per dot,  
three time units per dash.

The space between character elements is one time unit.

73 - Dave, N4ELM.

-----  
Date: Tue, 22 Jun 1999 09:37:41 EDT  
From: ARDUJENSKI@aol.com  
To: qrp-l@lehigh.edu  
Subject: [43250] QSL ROUTES  
Message-ID: <2f13ec2f.24a0eba5@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

For those of you without your own list of foreign callbook servers, etc here  
is a great site to have bookmarked:

<http://www.alltel.net/~johnshan/qslroute.html>

Also you may want to peek at the rest of K3WWP's website. It is a real  
QRPer's delight...Alan KB7MBI

-----  
Date: Tue, 22 Jun 1999 08:55:38 -0500  
From: "Walter Dufrain" <walter@inlink.com>  
To: "QRP-L" <qrp-l@lehigh.edu>  
Subject: [43251] Re: Proposed QRP rig appearance Contest  
Message-ID: <000c01bebc6\$eb52e260\$736ac4ce@nexar>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Stan, this is a wonderful idea, hopefully some of the movers & shakers of the qrp building contest will pick this up and run with it.

Ever show your new homebrew rig to a non-believer?? To us it is a pillar of beauty, but to the Airport Security, QRO folks, Newbies, and the general public it probably looks like a "pasture patty." And when you tell them you are talking to the world through this little box, it is very hard for the non-believer to visualize.

In all the show n tell sessions over the years, probably, the most negative comment about the qrp rigs is the lack of an S Meter. The users of the commercial rigs have grown so used to watching the little S Meter bobble up and down, that it can't be a radio without an S Meter :-)

Thanks for the wake-up call, Stan.  
72/73 Walter Dufrain, AG5P Wright City, Missouri

<<<snipped, mucho>>>  
Stan Wilson, said:

>Let's face it fellows the average QRP rig looks like it is home brew.  
>There have been a few rigs that had that something extra (i.e. the  
>ANV-20, SPRAT Nr. 80, Autumn 1994), >  
>So I would like to suggest a contest. >  
>Isn't it time to come up with a nice look for our units. If it is done  
>correctly it would be possible to adapt to several different internal  
>circuit designs.  
>de Stn AK0B  
>microres@crl.com  
>

-----  
Date: Tue, 22 Jun 1999 09:51:12 -0400  
From: "Stephen D. Cohen" <scohen@xps.xybion.com>  
To: qrp-l@lehigh.edu  
Subject: [43252] Western Florida QRP Club First Meeting - Correction  
Message-ID: <199906221413.KAA71506@nss4.cc.lehigh.edu>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT  
Content-Transfer-Encoding: 7BIT

Ladies and Gentlemen,

It seems entirely possible that the lack of response to this message may have been due to the incorrect e-mail address included in the body of the message. I most humbly apologize to all of those wishing to indicate their desire to attend who were unable to do so due to my mistake. What a way to kick off a new club. :-) I'll repeat the original message, but with the correct e-mail address, scohen@xybion.com, just in case you missed it the first time.

----- Slightly edited original message -----

After many discussions with other local QRP enthusiasts and, most recently, Mike Maiorana (KU4QO), it has come to my attention that there is some interest in forming a Western Florida QRP Club (WestFLA). The first meeting of this new QRP group will be held Saturday the 10th of July at 10:00 AM at a location in the Clearwater Florida area to be named later. All are welcome.

WestFLA will be based on the NorCal club structure, to wit, no structure at all. There will be no officers, no new or old business, no contesting reports, no repeater group pleas for money, no nothing that doesn't interest someone. The meetings will be completely informal gatherings of like-minded people in a venue that is conducive to discussion.

At the very least, for the first meeting I will bring my K2 and be prepared to answer questions. If someone else can commit to an antenna system, we can even put the K2 on the air. Mike has volunteered to bring his regen as well. I will also bring an oscilloscope and possibly a signal generator to help people debug any nagging problems they may have with their projects. I am really no expert in debugging things (except software), so hopefully someone else will bring their expertise.

There will definitely be a door-prize of some sort, though I have no idea where we will get one. Heck, I may donate an unbuilt 38 Special or Rainbow Tuner or some such to the cause. If anyone has a suggestion for a source of door-prizes at fair prices (free is good), please let me know.

Once we (Mike and I) have received some responses and have some idea how many will attend, we will pick a venue and advertise it in a future posting to QRP-L. I considered the Fudruckers on US19, but unfortunately it appears to be out of business. Maybe we will find a place on Clearwater beach so that we can put verticals at the waters edge after the meeting breaks up for some

big-time fun operating.

If anyone has any good ideas for restaurants in the Clearwater area, I would appreciate hearing about them. We are looking for a place that will let us take over a small section for all sorts of odd technical proceedings. I would rather avoid a place with table service, as splitting up checks or separate checks are always a pain. Strange looks are appreciated. The stodgy need not apply.

For those that are unfamiliar with central western Florida, Clearwater is just west of Tampa and about 1:45 minutes west of Orlando, 1 hour north of Sarasota, five hours north of Miami and five hours south-west of Jacksonville. Sorry, but I do not know the times from the Fort-Meyers area, though I wish I did (fill me in, please!). Driving directions will be provided for those that need them (once we have decided on a venue).

Please respond with your intent to attend in the next week or two. Please respond with e-mail to scohen@xybion.com and include WestFLA in your title, so that I can easily organize the responses. I subscribe to QRP-L in digest mode, so responses to QRP-L will be tough to compile, so please respond directly to me. We plan to hold these meetings on the second Saturday of every month, so if you can not attend the July meeting but expect that you will attend future meetings, please let me know that as well. If you have any other suggestions, feel free to air them.

I look forward to hearing from all of you western Florida QRPers, and maybe even some of you east-coast folks. I'm also hoping that some of the other club organizers will chip in their comments on how they get door-prizes and how they got their clubs off the ground (NorCal? AZ? NJ? Arkansas? Others I've missed? I'd love to hear from you guys.).

73,

Steve, N30IE

Stephen D. Cohen  
Engineering Manager  
Xybion Corporation, Sensor Positioning Systems  
11528 53rd Street North  
Clearwater, FLA 33760-4825  
scohen@xybion.com

-----  
Date: Tue, 22 Jun 1999 10:09:07 -0500  
From: Clifton W Sikes <ab5uacw@juno.com>  
To: qrp-l@Lehigh.EDU  
Subject: [43253] MFJ 931 Tuner manual?  
Message-ID: <19990622.101112.6734.1.ab5uacw@juno.com>

Does anyone have the manual for the old cream color tuner? My Buddy Bill is in need of one. Please e-mail him, at: N5LU@ parksbros.com  
He will be glad to pay copy cost, or you could scan it and send with an e-mail.

Thanks,

Clif

Clifton Sikes AB5UA QRP-L #478  
Earlsboro, Ok.  
ab5uacw@juno.com

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Get the Internet just the way you want it.  
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Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.

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Date: Tue, 22 Jun 1999 15:15:27 +0000  
From: "Bill Long" <wlong@wmdc.edu>  
To: ke3fl@yahoo.com, Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [43254] Re: J-Pole article makes it into QST Webzine  
Message-ID: <199906221513.LAA28312@ns1.wmdc.edu>  
Mime-version: 1.0  
Content-type: text/plain; charset="US-ASCII"  
Content-transfer-encoding: 7bit  
Content-Transfer-Encoding: 7bit

Looked good Phil! I built one of these per your instructions last year and my Dad uses it all the time from his apartment. He's quite happy with it.

BTW, the club (read N3SB) recruited me to do a QRP presentation at the July club meeting. I'd be looking for any suggestions you or others might have.

73 Bill NY3M  
-----

>From: Philip Karras <ke3fl@yahoo.com>  
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
>Subject: J-Pole article makes it into QST Webzine  
>Date: Mon, Jun 21, 1999, 16:31  
>

> My J-Pole design & tuning instructions has been  
> published on the  
> ARRL's webpage magazine in the Member's Only Webzine.  
> Goto the ARRL's website: [www.arrl.org](http://www.arrl.org) and click on the  
> Member's Only section, sign-in & click on the Webzine.  
> The table  
> of contents is on the right & you can then click on  
> the article:  
> "Building an Emergency J-Pole".

>  
> Also, visit my web-page for more emergency antenna  
> construction  
> projects and other emergency articles.  
> <http://www.qsl.net/ke3fl>

>  
> 72 & 73 de KE3FL  
> Phil K

>  
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>  
>  
> ===  
> Phil K  
> home: [ke3fl@juno.com](mailto:ke3fl@juno.com)  
> Alt: [ke3fl@yahoo.com](mailto:ke3fl@yahoo.com)  
> Reflectors: [ke3fl@arrl.net](mailto:ke3fl@arrl.net) and [ke3fl@qsl.net](mailto:ke3fl@qsl.net)  
> Web: <http://www.qsl.net/ke3fl>

>  
>  
> -----  
> Do You Yahoo!?  
> Get your free @yahoo.com address at <http://mail.yahoo.com>  
>

-----  
  
Date: Tue, 22 Jun 1999 11:52:12 -0400  
From: Zack Lau <[zlau@arrl.org](mailto:zlau@arrl.org)>  
To: [qrp-1@lehigh.edu](mailto:qrp-1@lehigh.edu)  
Subject: [43255] Re: Not QRP, tone generate circuitry needed  
Message-ID: <376FB12C.5E65EA86@arrl.org>  
Mime-Version: 1.0



Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

An op amp oscillator with a light bulb in the feedback circuit  
might cover the range with the proper optimizaton.--Zack W1VT

-----  
Date: Tue, 22 Jun 1999 09:20:24 -0700  
From: "Michael A. Gipe" <mgipe@reliablemeters.com>  
To: <kizerian@ced.utah.edu>, "Low Power Amateur Radio Discussion" <qrp-  
l@Lehigh.EDU>  
Subject: [43256] Re: Regen RX Using Q-multiplier Principle  
Message-ID: <194c01bebccb\$24787690\$140a0a0a@double\_trouble.reliablemeters.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Gang --

I took a look at Graham's regen circuit on Arnie's page, and was  
immediately struck by the realization that this circuit was exactly  
the same architecture as Paul Harden's Desert Ratt!

The signal chain in both cases is:

RF preamp, regenerative Q multiplier, emitter/source follower/AM  
detector, AF amplifier.

There are minor differences in implementation:

Firth uses a colpitts emitter follower for the Q multiplier while  
Harden uses a common base Hartley. Both control the bias to control  
the gain to control the regeneration.

Firth uses a JFET source follower and takes advantage of its  
non-linear region to detect AM. Harden uses an NPN emitter follower  
and a separate diode for detection.

Each has a few unique features. For example, Harden's circuit runs  
the Q multiplier stage off two volts, which sacrifices some Q for a  
mushier gain curve, which leads to a very smooth control of the regen  
action. Firth's circuit has an RF filter after the detector, which  
would be a useful improvement to the Desert Ratt.

Just goes to show that great minds do think alike!

Mike K1MG

-----  
Date: Tue, 22 Jun 1999 12:24:34 -0400  
From: Mark Sailer <msailer@msailer.rhic.bnl.gov>  
To: ab5uacw@juno.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [43257] Re: MFJ 931 Tuner manual?  
Message-ID: <376FB8C2.6B320304@msailer.rhic.bnl.gov>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Clifton W Sikes wrote:

> Does anyone have the manual for the old cream color tuner? My Buddy Bill  
> is in need of one. Please e-mail him, at: N5LU@ parksbro.com  
> He will be glad to pay copy cost, or you could scan it and send with an  
> e-mail.  
>  
> Thanks,  
>  
> Clif  
>  
> Clifton Sikes AB5UA QRP-L #478  
> Earlsboro, Ok.  
> ab5uacw@juno.com  
>  
> -----  
> Get the Internet just the way you want it.  
> Free software, free e-mail, and free Internet access for a month!  
> Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.

MFJ manuals can be gotten off the web at :  
<http://www.mfjenterprises.com>

follow the link to MANUALS.

MFJ lists the 931 as a HF artificial ground unit.

--

Mark Sailer  
N2JTW

-----  
Date: Tue, 22 Jun 1999 09:30:33 -0700  
From: Jerry Haigwood <w5jh@swlink.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [43258] Re: Not QRP, tone generate circuitry needed  
Message-ID: <376FBA29.F4297D66@swlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

>

Try a function generator IC (8038) driving a LM386. It can do sine, triangle, and square waves.

73, Jerry W5JH

-----  
Date: Tue, 22 Jun 1999 10:35:13 -0600  
From: jaywa5whn@juno.com  
To: qrp-1@lehigh.edu  
Subject: [43259] HW-7 xcvr microphonics & hum {pre-historic times}  
Message-ID: <19990622.103617.-832723.0.jaywa5whn@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Many years ago {1973}, I had built a Heathkit HW-7 xcvr. After reading the 2 previous notes about the HW-7, I had finally found my HW-7 assembly manual {I own 2 HW-7's, one modified & 1 in pristine original condition}. The microphonic problem was horrible, in the original design. The following 2 articles will cure all of the microphonic problems & improve sensitivity.

December, 1973 , page 23 of "QST", excellent article by KH6HKZ, Jerry Wine, "New Front End for HW-7".

January, 1974, page 35 of "QST", excellent article by W1CER {W1FB}, Doug De Maw, "HW-7 QRP Transceiver Modifications."

I believe you can obtain these copyrighted articles on CD from the ARRL for a fee.

I had completed the KH6HKZ modifications {1973} & I have used the HW-7 xcvr in several of the QRP contests. No microphonics or hum. I did not do all of the W1FB mods, since the KH6HKZ mods had cured some of the same problems highlighted in the W1FB article.

@ T minus 3 days & counting until the  
ARRL Field Day.

72...Jay, WA5WHN DM65pp  
Ponderosa, NM USA {Where everyday is Field Day.}

PS Which group is babysitting "Murphy's" evil twin this year?

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Get the Internet just the way you want it.  
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Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.

-----  
Date: Tue, 22 Jun 1999 11:54:56 +0000  
From: "Steven Weber" <kd1jv@moose.ncia.net>  
To: qrp-l@lehigh.edu  
Subject: [43260] Re: Proposed QRP rig appearance Contest  
Message-ID: <199906221638.MAA08872@moose.ncia.net>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT  
Content-Transfer-Encoding: 7BIT

Stan, et.al.

I don't know, there are more than a few home builders that do a fantastic job of packaging thier rigs. There's some real talent out there. A Ham from Denmark sent me some picutres of his HB gear, and

it is fantastic looking stuff. He must have had a machine shop at his disposal.

Most qrp rig designs leave out the "fluff" like S-meters and blinking leds. Our tiny rigs lead themselves to small boxes, which don't leave any room for meters and extenuates knobs and controls.

I find the mechanical aspects of packaging a rig to be more work than the electronics. It can be time consuming. I've often wished I had a sheet metal break so I could make my own custom chassies. I'm sure very few have that kind of luxury or more than few common hand tools to do the mechanical work. Just having a drill press makes you a class act! If I can get two holes to line up right, I'm doing good :-)

If I build a rig I plan on keeping a while, I'll do the effort needed to package it nicely. You should see the deluxe 20-10M SSB rig I'm building at the moment. Even with a 8" x 3" front panel, there isn't enough room for everything and I still need to add six push buttons!

72,

Steve, KD1JV in the white Mountains of New Hampshire  
"melt solder"

-----  
Date: Tue, 22 Jun 1999 12:45:18 EDT  
From: Richard Rood <fcsww@juno.com>  
To: qrp-l@lehigh.EDU  
Cc: qrp-l@lehigh.EDU  
Subject: [43261] Re: Proposed QRP rig appearance Contest  
Message-ID: <19990622.124452.5071.2.fcsww@juno.com>

On Tue, 22 Jun 1999 08:55:38 -0500 "Walter Dufrain" <walter@inlink.com> writes:

-----edit-----  
>The users of the commercial rigs have grown so used to watching  
>the little S Meter bobble up and down, that it can't be a radio  
>without  
>an S Meter :-)  
-----edit-----

My taste is illustrated by the  
Small Wonder Labs SWnn+ rigs.  
They've already won the contest  
for me 'cause they listen real  
good and emit a fine, clean

cw signal without a glittering,  
complex array of switches.  
My favorite feature: "switch on"  
the rig by attaching the power  
cord. :-)

dick, w2scf  
qrp-l 1613

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Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.

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Date: Tue, 22 Jun 1999 11:52:06 -0500  
From: Bcieslak@ra.rockwell.com  
To: qrp-l@lehigh.edu  
Subject: [43262] FD Power Safety??  
Message-ID: <86256798.005CAB07.00@ramilwsmt01.ra.rockwell.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=us-ascii  
Content-Disposition: inline

Our Club will be running 2A again this year and our power and distribution system will consist of a 3KW generator with 2 -100ft cords with outlet boxes on the ends..A group of 4 outlets for each station. The annual debate concerns grounding.....Do we add a earth ground at the generator? Some say no saying that it could complete a path thru an operator if he touches a chassis that may have become hot due to failure. Some say yes to avoid shock in case of generator malfunction. Do we tie grounds or neutrals to the ground rod? What about portable GFCI's at each station, does anyone use em?

Your input will be appreciated and may be included in our club's FD manual...

Brian AE9K

---

Date: Tue, 22 Jun 1999 12:55:51 -0400  
From: "Jim Stafford, W4Q0" <w4qo@amsat.org>  
To: wlong@wmcdc.edu, QRP-L <qrp-l@lehigh.edu>  
Subject: [43263] Club talk on overheads

Message-ID: <376FC015.D43B7E63@amsat.org>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Bill,

I take no credit for this as George Heron N2APB put together a nice talk on QRP with some pix/etc. It is available on:  
<http://www.njqrp.org/whyqrp/whyqrp.htm>

I have taken about the first 30 slides and put them on overheads and have used them all over, including Dayton. If you want, let me know and I will forward them for your use during the presentation.

--

Jim Stafford, W4QO	770-993-9500	VP - QRPARCI #6515
11395 West Road	770-993-8932 fax	Mgr - W4WOW SciTrek

+++ The THRILL is back - QRP - what ham radio is all about!  
+++<http://www.qrparci.org>

-----

Date: Tue, 22 Jun 1999 13:06:12 EDT  
From: HWRM1SS@aol.com  
To: acomas@panix.com, qrp-1@lehigh.edu, njqrp@njqrp.org  
Subject: [43264] Re: Testing Coax Cables  
Message-ID: <9c8cedde.24a11c84@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Hi Andrew,

You can also test the cable using a Time Domain Reflectometer (TDR)... It will show any anomalies along the cable as bumps -- You can terminate the cable into a 50 ohm load or leave it "open-circuit" -- The TDR will just show a different indication for each at the end of the cable.

I used a TDR to test antenna cables onboard the submarines I served on. Great tool. And it beats doing visual inspections while submerged...

Howard K3HW

-----  
Date: Tue, 22 Jun 1999 10:59:18 -0700  
From: Bill Jones <kd7s@psnw.com>  
To: microres@crl.com, qrp-1@lehigh.edu  
Subject: [43265] Re: Proposed QRP rig appearance Contest  
Message-ID: <376FCEF6.1D07B2F0@psnw.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

I, for one, am very much in favor of making our homebrew gear look attractive. If nothing else, it sends a (visual) signal to others that I take pride in my workmanship. I've heard it said that an attractive front panel layout in a nice cabinet doesn't make a rig perform better. Maybe not, but I sure feel better at the end of each contact. The best compliment I have ever received was at a hamfest where a non-QRP'er asked me about a homebrew transceiver, "Hey, that's a cute little rig. Where'd you buy it?"

Stanley Wilson wrote:

> Let's face it fellows the average QRP rig looks like it is home brew.  
> There have been a few rigs that had that something extra (i.e. the  
> ANV-20, SPRAT Nr. 80, Autumn 1994), however, for the most part our QRP  
> rigs look like something built with limited tools. We have seen some  
> really nice keys like the NorCal K8FF QRPp key on the cover of Winter 97  
> issue. So tools are not the problem.

--

=====  
Bill Jones - KD7S <><  
Sanger, California  
<http://www.psnw.com/~kd7s>  
=====

-----  
Date: Tue, 22 Jun 1999 14:02:22 -0400  
From: Zack Lau <zlau@arrl.org>  
To: qrp-1@lehigh.edu  
Subject: [43266] Re: Not QRP, tone generate circuitry needed  
Message-ID: <376FCFAE.343058D1@arrl.org>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit



Content-Transfer-Encoding: 7bit

Horowitz and Hill's Art of Electronics discusses Wien Bridge  
oscillators--Zack W1VT

-----  
Date: Tue, 22 Jun 1999 12:28:19 -0500  
From: Clifton W Sikes <ab5uacw@juno.com>  
To: ccart@phideaux.com  
Cc: qrp-1@Lehigh.EDU  
Subject: [43267] Re: MFJ 931 Tuner manual?  
Message-ID: <19990622.122939.6734.3.ab5uacw@juno.com>

Oops! I don't have the tuner here. Maybe it's a 941. There is a new  
version, and he got the manual for it, but some differences.

Sorry for the mistake.

Clif AB5UA

-----  
Get the Internet just the way you want it.  
Free software, free e-mail, and free Internet access for a month!  
Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.

-----  
Date: Tue, 22 Jun 1999 12:19:58 -0500  
From: Tim Pettibone <tpettibo@NMSU.Edu>  
To: qrp-1@lehigh.edu  
Subject: [43268] code materials  
Message-ID: <3.0.6.32.19990622121958.007dc8b0@cnmailsvr.nmsu.edu>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Gang:

I've been asked to put together a short piece on increasing one's cw skills  
for the local newsletter. There are several interested in getting their  
speed up from 5 wpm to 13 wpm. Any suggestions as to sources, reprints,  
software. Guess I should have paid more attention to earlier posts!  
Chuck, can I refer them to your website stuff?

OQRP - I'm going to field day with the N5BL group - QRO only and sponsored  
by the local radio club (Mesilla Valley Radio Club) That's a first!

Tim K5OI  
qrpl#73

-----  
Date: Tue, 22 Jun 1999 13:15:10 -0500  
From: Karl.Kanalz@optelinc.com  
To: HWRM1SS@aol.com  
Cc: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [43269] Re: Testing Coax Cables  
Message-ID: <86256798.0064B1F4.00@hdqsmtp01.optelinc.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=us-ascii  
Content-Disposition: inline

I agree that using a TDR (Time Domain Reflectometer) is a superlative instrument to test cables (of all kinds). You can buy one for yourself at your friendly surplus test equipment dealer for about.... oh.... \$8,000.18.

I suppose you could rent it out to others in between the two or three year interval you'd be using it for your own purposes, and you would then recover your investment in about 64.3 years!

Karl K - W8TIF  
McKinney, Texas

HWRM1SS@aol.com on 06/22/99 12:06:12 PM

Please respond to HWRM1SS@aol.com

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
cc: (bcc: Karl Kanalz/hdq/Optel)

Subject: Re: Testing Coax Cables

Hi Andrew,

You can also test the cable using a Time Domain Reflectometer (TDR)... It will show any anomalies along the cable as bumps -- You can terminate the cable into a 50 ohm load or leave it "open-circuit" -- The TDR will just show a different indication for each at the end of the cable.

I used a TDR to test antenna cables onboard the submarines I served on. Great tool. And it beats doing visual inspections while submerged...

Howard K3HW

-----  
Date: Tue, 22 Jun 1999 18:14:56 +0000  
From: Goran Hosinsky <hosinsky@royac.iac.es>  
To: qrp-l@lehigh.edu  
Subject: [43270] EA8/DK9PD on 20  
Message-ID: <376FD2A0.B21EE04F@royac.iac.es>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Hi,

Have a look for EA8/DK9PD on 14055-14060. He is on with a Sierra and a dipole from the top of La Palma Island, at 2400 meters above sea level.

73  
Goran ea8yu

-----  
Date: Tue, 22 Jun 1999 12:24:43 -0500  
From: Tim Pettibone <tpettibo@NMSU.Edu>  
To: qrp-l@lehigh.edu  
Subject: [43271] correction -  
Message-ID: <3.0.6.32.19990622122443.007dad0@cnmailsvr.nmsu.edu>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

That should have been QRP only - that's the amazing part!

Tim K5OI

-----  
Date: Tue, 22 Jun 1999 14:22:10 -0400  
From: "Richard Brummer" <obvious@bestweb.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.edu>  
Subject: [43272] Re: Proposed QRP rig appearance Contest  
Message-ID: <009201bebcddc\$25629fc0\$3806b3d8@default>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Well, Bill, you know what they say about "first impressions."

And that's what you get when you look at the front panel of ANY rig --  
homebrew or not !

73,  
Dick K2REB

-----  
Date: Tue, 22 Jun 1999 13:23:33 -0500  
From: George F Franklin <w0av@juno.com>  
To: qrp-l@lehigh.edu  
Subject: [43273] Robert Dollar 3rd Overtone Xtal Osc Circuit  
Message-ID: <19990622.132334.-176255.1.w0av@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Hello Gang,

You did so well resurrecting the Q-mult Regen RX circuit that I will try  
another memory teaser.

Back in the early post-war years I used a very simple triode 3rd overtone

xtal oscillator circuit which worked extremely well with only one LC, utilizing capacitive tap feedback. It was named after its designer Robert Dollar.

Does anyone have the circuit and, also, who was Robert Dollar?

TIA & 72 de George/W0AV

-----  
Date: Tue, 22 Jun 1999 13:26:20 -0500  
From: George F Franklin <w0av@juno.com>  
To: microres@crl.com  
Cc: qrp-1@Lehigh.EDU  
Subject: [43274] Re: Proposed QRP rig appearance Contest  
Message-ID: <19990622.132621.-176255.2.w0av@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Hi Gang,

I would like to find a simple s-meter circuit and indicator (LED?) which would fit on the front panel of my NC20.

Any ideas?

72 de George/W0AV

-----  
Date: Tue, 22 Jun 1999 11:37:25 -0700  
From: Dave Barrett <DBarrett@creo.com>  
To: "'Karl.Kanalz@optelinc.com'" <Karl.Kanalz@optelinc.com>, Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [43275] RE: Testing Coax Cables  
Message-ID: <CE0A40BFE0CDD111A2B800A0C99B83EB013138D2@msgcreo2.creo.bc.ca>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"

There was a simple but effective TDR circuit described in one of the mags a few years back that was a small add-on box to work with one's o/scope, I can look out the info for anyone interested.

Dave VE7PCC Vancouver BC Canada (Recumbent Builder)

-----Original Message-----

From: Karl.Kanalz@optelinc.com [mailto:Karl.Kanalz@optelinc.com]  
Sent: Tuesday, 22 June, 1999 11:15 AM  
To: Low Power Amateur Radio Discussion  
Subject: Re: Testing Coax Cables

I agree that using a TDR (Time Domain Reflectometer) is a superlative instrument to test cables (of all kinds). You can buy one for yourself at your friendly surplus test equipment dealer for about.... oh.... \$8,000.18.

I suppose you could rent it out to others in between the two or three year interval you'd be using it for your own purposes, and you would then recover your investment in about 64.3 years!

Karl K - W8TIF  
McKinney, Texas

HWRM1SS@aol.com on 06/22/99 12:06:12 PM

Please respond to HWRM1SS@aol.com

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
cc: (bcc: Karl Kanalz/hdq/Optel)

Subject: Re: Testing Coax Cables

Hi Andrew,

You can also test the cable using a Time Domain Reflectometer (TDR)... It will show any anomalies along the cable as bumps -- You can terminate the cable into a 50 ohm load or leave it "open-circuit" -- The TDR will just show a different indication for each at the end of the cable.

I used a TDR to test antenna cables onboard the submarines I served on. Great tool. And it beats doing visual inspections while submerged...

Howard K3HW

-----  
Date: Tue, 22 Jun 1999 14:41:11 -0400  
From: "Mike Yetsko" <myetsko@insydesw.com>  
To: <Karl.Kanalz@optelinc.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [43276] Re: Testing Coax Cables  
Message-ID: <020d01bebcde\$ce709980\$9001a8c0@mikey.wn.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

>I agree that using a TDR (Time Domain Reflectometer) is  
>a superlative instrument to test cables (of all kinds). You can  
>buy one for yourself at your friendly surplus test equipment  
>dealer for about.... oh.... \$8,000.18.  
>  
>Karl K - W8TIF  
>McKinney, Texas

Actually....

TDRs designed for network cables, and quite applicable to this use,  
are available for under \$300, if you use your own scope.

Radio Shack National Parts even stocked a TDR kit (although it was  
'set' for 93 ohm ARCNet coax) for about \$80. It was intended that  
shops and/or computer centers that installed ARCNet would order  
the kit, build it, and use it. However, word leaked that it was  
available  
and Radio Shack got swamped with requests for the thing.

All a TDR is really is a pluse generator, but you need a decent scope  
to see what is happening.

The Radio Shack TDR was written up as an article in QST back in the  
early 1980's by Tom King, KD5HM, although no mention was made  
of the fact that it was available as a kit from Radio Shack National

Parts.

You could build your own, quite servicable for most HAM use, probably for less than \$40. The key is to generate CLEAN and FAST rise times on the pulse.

Mike Yetsko  
N1DVJ

-----  
Date: Tue, 22 Jun 1999 18:56:08 +0000  
From: Goran Hosinsky <hosinsky@jet.es>  
To: qrp-1@lehigh.edu  
Subject: [43277] Not QRP: LAN/Modem problem  
Message-ID: <376FDC48.A963EAAE@jet.es>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Hi.

Please excuse the bandwidth but I really do not know what to do. I need to use FTP and TELNET from home via my modem. I installed a LAN card so that I can get the list messages to my PC at work without using the telephone. This works fine, but now I cannot connect ftp, telnet or ping via the modem, they all want to use the LAN card.

I run NT 4.0 with an internal modem and an internal LAN card. In control panel >> internet >> connection I have the "connect to the internet using a modem" option set. Netscape works as it should using the modem, or, when the other option is set, using the LAN card.

I need to use ftp and telnet from home using the modem. I have tested with different ftp and telnet programs, all with the same problem. If you have any idea what to do, please mail me directly.

Saludos  
Goran ea8yu



-----  
Date: Tue, 22 Jun 1999 13:02:30 -0600  
From: Bruce Kizerian <kizerian@ced.utah.edu>  
To: qrp-1@Lehigh.EDU, Charles.Kitchin@analog.com  
Subject: [43278] FM ElmeRadio and Other Regenerate Ideas  
Message-ID: <376FDDC6.43DF15F3@ced.utah.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

After playing with the prototype ElmeRadio for a few minutes, my 12 year old daughter announced. "This is neat, dad. I want one--only I want an FM one."

At first I thought it was an impossible idea, but then the word superregeneration popped into my head. Oh boy, what I don't need right now is another project, but when the kid asks, dad is obligated to give it a try. Anyone have any good circuits for a superregenerative receiver covering 88-108 MHz or thereabouts?

Now for the other idea. Has anyone tried using an NE602 as a regenerative front end. You could configure the oscillator as a Q-multiplier and use the mixer as a detector (with 18dB of gain), feed it differentially into an LM386 and...well, the rest is up to some ingenious tinkerer with more spare time on his hands than I have just now.

The Level II ElmeRadio is almost there. It uses a FET gain stage between the regenerative stage and the diode. A volume control is necessary. This little guy can play the AM broadcast band so loud it will drive you to distraction (just like my kids). The TL431, also, drives a small speaker with ample volume.

Level III will be a MW/SW version with an RF amplifier, plug-in coils and a calibrated dial.

Until then, keep the homebrew fires lit, because like most of you I can think a lot faster than I can solder.

Bruce kk7zz  
-----

Date: Tue, 22 Jun 1999 14:32:32 -0500  
From: Karl.Kanalz@optelinc.com  
To: "Mike Yetsko" <myetsko@insydesw.com>  
Cc: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [43279] Testing Coax Cables (revisited)  
Message-ID: <86256798.006BC7EB.00@hdqsmtp01.optelinc.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=us-ascii  
Content-Disposition: inline

I ALSO agree that you can build your own "guts" of a TDR, and as Mike points out in his message, one of the secrets is to build a CLEAN and FAST pulse. The remaining important secret is having an oscilloscope that has adequate bandwidth to accurately MEASURE that "clean and fast pulse".

There goes the dollars budget (again!).

Karl K - W8TIF  
McKinney, Texas

"Mike Yetsko" <myetsko@insydesw.com> on 06/22/99 01:41:11 PM

To: Karl Kanalz/hdq/Optel, "Low Power Amateur Radio Discussion"  
<qrp-l@Lehigh.EDU>  
cc:  
Subject: Testing Coax Cables

>I agree that using a TDR (Time Domain Reflectometer) is  
>a superlative instrument to test cables (of all kinds). You can  
>buy one for yourself at your friendly surplus test equipment  
>dealer for about.... oh.... \$8,000.18.

>

>Karl K - W8TIF  
>McKinney, Texas

<snip>

You could build your own, quite servicable for most HAM use, probably for less than \$40. The key is to generate CLEAN and FAST rise times

on the pulse.

Mike Yetsko  
N1DVJ <snip>

-----  
Date: Tue, 22 Jun 1999 12:34:43 PDT  
From: lane cox <lanecox@hotmail.com>  
To: qrp-l@lehigh.edu  
Subject: [43280] tubes for sale  
Message-ID: <19990622193443.72255.qmail@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

I have a few new tubes for sale. Please E-mail for details.  
Thanks. Lane Cox N6NLB

-----  
Get Free Email and Do More On The Web. Visit <http://www.msn.com>

-----  
Date: Tue, 22 Jun 1999 13:09:48 -0700  
From: Wayne Burdick <n6kr@elecraft.com>  
To: k7bli@iname.com  
Cc: elecraft@qth.net, qrp-l@lehigh.edu  
Subject: [43281] Re: Where did "K-2" come from?  
Message-ID: <v03102806b3959b80438e@[206.169.227.228]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>Would somebody enlighten me with the history of the name "K-2"??...  
>Tks in advance.  
>Duane  
>K7BLI

Hi Duane,

There's a story behind the name. Starting in about 1990 I designed a series

of QRP transceivers that I named after mountains or mountain ranges ("Mt. Laguna," "Sierra," etc.). Only one of them saw the light of day--the Sierra, which I designed for the NorCal QRP Club. Naturally, K7RO, the designer of NorCal's next project called it the "Cascade," and then NN1G got into the act with the "Green Mountain" and "White Mountain."

I then promised (in front of a large crowd at Pacificon) that I would never again name a rig after a mountain. Five seconds later, Eric and I introduced our new all-band kit. I explained how, given the proximity to the year 2000, we had considered the name "2K."

But (and Eric and I slapped our foreheads at this moment of drama), we had to admit that "2K" was taken--and by a linear amplifier of all things. This would set an unsavory precedent for a QRP rig. "So," we concluded, "let's just swap the letters...K2!" The audience then collectively groaned at the realization that this was, indeed, the name of another mountain.

I then promised that \*this\* would be the last rig so named. ;)

73,  
Wayne  
N6KR

>  
>-----  
>Get free personalized email at <http://www.iname.com>  
>  
>---  
>Submissions:           elecraft@qth.net  
><Please note: The list server automatically rejects HTML encoded emails. >  
>List Archive page:   <http://www.qth.net/archive/elecraft/elecraft.html>  
>Elecraft Web Page:   <http://www.elecraft.com>

-----  
Date: Tue, 22 Jun 1999 10:22:14 -1000 (HST)  
From: "Mike W. Burger" <mike@gold.chem.hawaii.edu>  
To: Mike Yetsko <myetsko@insydesw.com>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [43282] Re: Testing Coax Cables  
Message-ID: <Pine.SUN.3.91.990622101544.11301A-100000@gold.chem.hawaii.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Well when we installed the first segment of internet that was to become the hawaii.edu domain, we were concerned about all the tugging and pulling on that 500 meters of cable.

We "made" a TDR by using a triggered sweep scope and a standard square wave generator set to produce a narrow pulse at intervals hooked to the end of the cable. It gave a beautiful radar reflection from the unterminated end of the cable, and to our relief showed no other reflections.

Mike Burger      University of Hawaii at Manoa      Dept. of Chemistry

-----  
Date: Tue, 22 Jun 1999 21:15:22 +0100  
From: "Tony Fishpool" <g4wif@btinternet.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [43283] Re: Proposed QRP rig appearance Contest  
Message-ID: <000201bebced\$35383660\$0ae3abc3@p75>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Making a decent job of packaging a rig doesn't have to be hard work. If you are reading this, then the odds are, you have a computer capable of producing presentable front panels. Graphics software comes free on the front of magazines nowadays. Casing the project doesn't require metal bending gear. Recycled RS232 and old modem boxes look good and cost little. As for "fluff" like S-meters. Even DC receivers can have one (if you feel the need and don't take it seriously). Circuits abound in SPRAT and other sources.

So is casing a project that hard?

73  
Tony G4WIF

-----  
Date: 22 Jun 1999 16:36:13 -0400  
From: Glen Leinweber <leinwebe@mcmail.cis.McMaster.CA>

To: qrp-l;  
Subject: [43284] TDR on the cheap - a one transistor design  
Message-ID: <1999Jun22.163613-0400@[130.113.234.7]>

OK, this TDR "dream" thread has gone far enough...  
Warm up those irons!

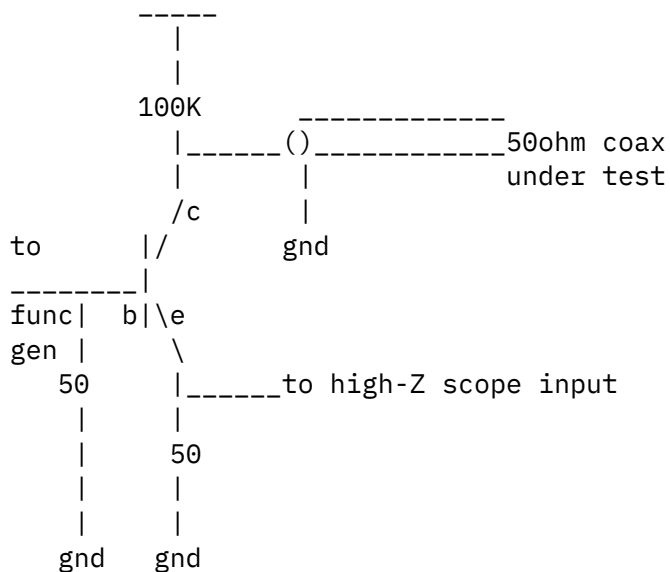
Yes, the key is to generate a nice fast pulse, and to have a nice fast scope to see it. So here's the fast pulse generator, and a method to hook it up to coax to do the TDR thing. Although it can be made to repetitively pulse itself, this version will require an external generator to trigger the "pulse" event.

Not too many have seen this kinda circuit...it's called avalanche mode, and can fling bits of transistor around the shack if mis-wired.

Basically, you apply so much collector voltage that the base-collector junction goes into breakdown region. At that point, you apply a little base current and WHANG!...you get a gonzo-fast turn-on pulse. Like sub-nanosecond rise-time. With a 2N3904 no less!

Here's an ascii schematic:

Variable Vcc (up to +400v)



Each 2N3904 will have a different avalanche voltage, so a variable supply is likely needed.

If the supply voltage is too high, too much avalanche current flows thru the transistor and it'll overheat...you only want a milliamp or two to flow.

Here's a timing sequence of what happens:

Assume the collector starts at zero volts. The coax length under test acts as a capacitor so that the collector voltage rises toward  $V_{cc}$  exponentially with an RC time constant equal to the 100k resistor times the total coax capacitance.

Eventually, the collector starts conducting (avalanche) which limits the rise of collector voltage. Now the coax has this voltage between center conductor and grounded shield. The transistor is now ready to trigger.

At this point, apply a +ve going sinewave or square wave to the base. The transistor turns on very hard and fast. It acts as a switch, connecting the coax to the 50-ohm emitter resistor (and to the scope as well). Of course, the emitter resistor should be equal to the characteristic impedance of the coax-under-test.

The coax discharges at the speed-of-light into the 50 ohm emitter resistor. Any impedance bumps will be visible on the scope as the coax charge dumps into the 50-ohm load. Eventually, the coax dumps all its charge ( $1\text{ns/ft} \times \text{velocity factor}$ ) and the pulse ends, and the transistor turns off.

Now collector voltage starts to rise again, and the whole thing can be repeated. Try to set the function generator frequency just high enough that it turns on the transistor just AFTER it reaches its collector avalanche point.  
A poor-man's TDR.

If you replace the base resistor (50 ohms) with about 10k resistor to ground, you can make it self-oscillate. You may have to play about with this resistor value. No function gen needed.

Have fun, wear glasses while troubleshooting!  
Glen VE3DNL

-----  
Date: Tue, 22 Jun 1999 16:38:33 -0400  
From: "Ed Tanton" <n4xy@att.net>  
To: "QRP-L Reflector" <qrp-l@Lehigh.EDU>  
Subject: [43285] FW: Collins parts  
Message-ID: <020401bebcef\$32574ba0\$01010101@n4xy>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Guys... I would call your attention to the Collins Antenna (637T-2) listed for sale below: while a bit heavy for backpacking (I'd do it-but it's about 6in diameter and 8in long) this is a marvelous 3-30MHz dipole, using a reel of of phosphor-bronze stranded wire on each end, with a built-in balun. The pay-out is calibrated using a scale in MHz built-in to each end. Basically, after zeroing the indicator arm, you reel off 7.04MHz from each side, for example, and you're in business. The main body also has a mounting hole molded in the top.

Also, Ron's a great guy to deal with, so I listed the whole ad-just in case you needed anything else!

72 / 73 Ed N4XY email: <n4xy@arrl.net>

-----  
--  
Subject: FS: Collins parts

351E4 table top mount for KWM2/ sline - \$40  
312B4 meter \$25. KWM2/ 32S PA cage \$10  
312B4 cabinet & ring. \$50 312B5 cab. & ring \$60.  
CC-3 carrying case \$50. 312B4 "bare" front panel \$10.  
small cabinet ring \$20. panel mount mic jack \$4  
\*\*\*\*\*  
637T-2 antenna \$125.  
\*\*\*\*\*  
62S1 original manual \$35.  
312B4/5 orig. man. \$20. KWM2/2A orig. man. \$30.  
Very nice MM1 RE mic- \$150  
F455 J 15 1500hz. 75A4 filter \$175.  
Tnx, Ron K5GIT ronfol@hilconet.com



Sponsored by the Collins Collectors Association <http://www.collinsradio.org>  
Nets: Tues: 3.805 MHz-8pm Central / Thu: 3.875 MHz-8pm Central  
Fri: 3.895 MHz-10pm Central / Sun: 14.263 MHz-2000 UTC (3pm Central)

Listserver Submissions: collins@listserv.tempe.gov  
Listserver Subscription: listserv@listserv.tempe.gov - "subscribe collins  
'name' 'call'"  
Listserver Unsubscribe: listserv@listserv.tempe.gov - -"signoff collins"

-----  
Date: Tue, 22 Jun 1999 14:03:36 -0700  
From: Jim Lowman <jmlowman@ix.netcom.com>  
To: qrp-l@lehigh.edu  
Subject: [43286] Outbacker as mobile antenna?  
Message-ID: <376FFA28.9D64D8E6@ix.netcom.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Gang,

I'm considering a mobile setup in my car (late-model Buick Century) and the Outbacker antenna was one that was suggested. I note that it has a trunk-lid mount available, which is good, as the "plastic" bumpers seem to make any other sort of installation less than feasible. This was my late father's car, and I'd rather not drill any holes, if possible.

Has anyone experimented with the Outbacker, who would be willing to share results? I just ordered one of those tiny paddles that the gentleman in the St. Louis area is selling, and have an Icom IC-706 (which will go QRP easily) with the 500 Hz filter, ready to install.

Any advice will be greatly appreciated.

TNX es 72 de Jim - AD6CW

-----  
Date: Tue, 22 Jun 1999 14:11:14 -0600  
From: tom whalen <wb5qyt@eFortress.com>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [43287] TH6DXX antenna info wanted  
Message-ID: <376FEDE2.59B3@eFortress.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Gang,

Was given the above but no doc's. Would someone mind making me a copy of the manual? I will pay for copies and postage. Thanks, Tom WB5QYT

-----  
Date: Tue, 22 Jun 1999 17:17:00 EDT  
From: K2UD@aol.com  
To: qrp-1@lehigh.edu  
Subject: [43288] Re: FD Power Safety??  
Message-ID: <ec1ff786.24a1574c@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Don't ground them at all. Don't feed them any gas, in fact, don't even turn them on. GO SOLAR! After all, we're QRPers, who wants to feed a sizzling hot generator at 3am when you can't focus your eyes, raise your hand now.

On the serious side, one year in my pre-QRP days, our rig was not grounded. Don't know if the generator was either (probably not). Lightning hit about 5 miles away, I felt it through the metal skirted volume knob of the SB-301 we were using at the time. My vote would be to ground the generator and the rig.

Solar power does away with all of this (yes, use storage batteries at night!). A lot quieter too.

72

Howard Kraus, K2UD

-----  
Date: Tue, 22 Jun 1999 17:21:52 -0400  
From: "Buck, Preston D" <BuckPD@corning.com>  
To: "'brian@iquest.net'" <brian@iquest.net>, "'qrp-1'" <qrp-1@Lehigh.EDU>  
Subject: [43289] RE: mini-dxpeditio to WY  
Message-ID: <9C472CF03C5ED111BBF20000F84A17010125BC82@EAGLE.CORNING.COM>  
Content-Return: allowed  
Mime-Version: 1.0  
Content-Type: text/plain

Wahoo!!

My meetings got done early. So I should make it to WY by about 1730 mountain time, not the predicted 1900.

73,  
Preston, n0g1m/p, temp WY

-----  
Date: Tue, 22 Jun 1999 17:50:35 -0400  
From: "Ed Tanton" <n4xy@att.net>  
To: "Richard Brummer" <obvious@bestweb.net>  
Cc: "QRP-L Reflector" <qrp-l@Lehigh.EDU>  
Subject: [43290] RE: DSW-40 QSOs  
Message-ID: <021501bebcf9\$4254b9c0\$01010101@n4xy>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

I'll be +/-5 from 7.040 for an hour or two-starting in about 10 mins (e.g. 1800 EDST) if anybody still wants to hear a DSW-40.

72 / 73 Ed N4XY email: <n4xy@arrl.net>

-----  
Date: Tue, 22 Jun 1999 17:04:12 -0500  
From: "Jerry Decker" <n5rv@hex.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [43291] Re: Where did "K-2" come from?  
Message-ID: <000b01bebcfb\$2a5cf1a0\$0201a8c0@jdecker>

I think you should keep the "name of mountains" theme. You have climbed many to get where you are at. Maybe the next one should be named "Summit", HIHI.

72, 73 de Jerry

N5RV - Red Hot NC20 - G-QRP #10353 - QRP-L # 1969  
Irving, Texas - EM12MT - 32 48' 17'' N, 96 57' 31'' W  
----- Original Message -----  
From: Wayne Burdick <n6kr@elecraft.com>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Sent: Tuesday, June 22, 1999 3:09 PM  
Subject: Re: Where did "K-2" come from?

> >Would somebody enlighten me with the history of the name "K-2"??...

> >Tks in advance.

> >Duane

> >K7BLI

>

> Hi Duane,

>

> There's a story behind the name. Starting in about 1990 I designed a series

> of QRP transceivers that I named after mountains or mountain ranges ("Mt.

> Laguna," "Sierra," etc.). Only one of them saw the light of day--the

> Sierra, which I designed for the NorCal QRP Club. Naturally, K7RO, the

> designer of NorCal's next project called it the "Cascade," and then NN1G

> got into the act with the "Green Mountain" and "White Mountain."

>

> I then promised (in front of a large crowd at Pacificon) that I would never

> again name a rig after a mountain. Five seconds later, Eric and I

> introduced our new all-band kit. I explained how, given the proximity to

> the year 2000, we had considered the name "2K."

>

> But (and Eric and I slapped our foreheads at this moment of drama), we had

> to admit that "2K" was taken--and by a linear amplifier of all things.

This

> would set an unsavory precedent for a QRP rig. "So," we concluded, "let's

> just swap the letters...K2!" The audience then collectively groaned at the

> realization that this was, indeed, the name of another mountain.

>

> I then promised that \*this\* would be the last rig so named. ;)

>

> 73,

> Wayne

> N6KR

>

>

>

> >

> >-----

> >Get free personalized email at <http://www.iname.com>

> >

> >---

> >Submissions: [elecraft@qth.net](mailto:elecraft@qth.net)

> ><Please note: The list server automatically rejects HTML encoded emails.

>

> >List Archive page: <http://www.qth.net/archive/elecraft/elecraft.html>

> >Elecraft Web Page: <http://www.elecraft.com>

>

>

-----  
Date: Tue, 22 Jun 1999 16:52:25 -0500  
From: Clifton W Sikes <ab5uacw@juno.com>  
To: qrp-l@Lehigh.EDU  
Subject: [43292] MFJ 941 Tuner.....for sure!  
Message-ID: <19990622.165226.6734.0.ab5uacw@juno.com>

Folks,

Sorry about wasting your time with bad/half information. Bill has a 941 tuner, the old style with cream color face and wood grain top. He did download the manual for the 941E, but there are some changes. If you can help him out, please e-mail him. N5LU@ parksbro.com

I won't bug you again, honest!

Clif AB5UA

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Get the Internet just the way you want it.  
Free software, free e-mail, and free Internet access for a month!  
Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.

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End of QRP-L Digest 1496

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